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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,797	03/23/1999	MORTEN STORR	09918/032001	8926
20985	7590	04/04/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			HOANG, THAI D	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action SummaryApplication No. **09/274,797**

Applicant(s)

STORR, MORTEN

Examiner

Thai D Hoang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauer, US Patent No. 5,528,591.

Regarding claims 37, 39, 45 and 51 Lauer discloses a method and system called end-to-end credit-based flow control system in a digital communication network. Lauer teaches that the system comprises a plurality of source nodes, destination nodes, and intermediate nodes (figs. 1-4), where in the intermediate nodes perform the steps of:

receiving a forward resource management (FRM) cell from a source and forwarding FRM cell to a destination (fig.3-4) on a virtual connection (receiving a forward resource management control cell in a network switch; forwarding the forward resource management control cell to a destination node);

determining rate based follow control data (credit) for that virtual connection after forwarding FRM cell and storing the rate based follow control data in register 84; col. 4, lines 1-16; col. 7, line 61-col. 8, line 13; col. 8, lines 19-55 (determining flow control data in the network switch, in response to receipt of the forward resource management control cell corresponding to a connection linking a source node and the destination node via the network switch; storing the rate-based, flow-control data in the network

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switch before receipt of a backward resource management control cell in the network switch);

receiving from the destination a backward resource management (BRM) cell corresponding to the FRM cell; col. fig. 3; col. 4, lines 1-16; col. 7, lines 20-32; col. 7, line 61- col. 8, line 13; col. 8, lines 19-55 (receiving in the network switch, from the destination node, the backward resource management control cell corresponding to the forward resource management control cell);

comparing and modifying (if necessary) the rate based flow control data in the BRM cell received from the previous node; figs. 7-8; abstract; col. 4, lines 1-16; col. 7, lines 20-32; col. 7, line 61-col. 8, line 13; col. 8, lines 19-55 (modifying in the network switch the backward resource management control cell, before forwarding the backward resource management control cell to the source node, based on the rate based, flow-control data determined in response to the receipt of the forward resource management control cell). Lauer does not explicitly disclose the flow control data in the network switch is determined after forwarding FRM cell to the next switch node. However, the rate based flow control data determined after forwarding FRM cell to the next switch node is applied in conventional system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine the flow control data in the network switch after forwarding FRM cell to the next switch node in order to reduce round trip delay of the RM cell.

Regarding claims 38 and 50, Lauer discloses that the system is an ATM system, therefore, both FRM and BRM cells must be ATM cells; col. 1, line 14-15; col. 2, lines

16-22 (the forward resource management control cell comprises an asynchronous transfer mode forward resource management control cell and the backward resource management control cell comprises an asynchronous transfer mode backward resource management control cell).

Regarding claims 40-41 (as best understood) and 52-53, Lauer teaches that the system comprises a queue of buffers. The result of the division is determined periodically by a microprocessor 80 and stored in a set of electronic registers 84, one register representing each virtual connection (placing a management event record corresponding to the removing the management event record from the queue). The microprocessor 80 contains computer program 82 for processing rate based, follow control data for each virtual connection. (processing the management event record using a rate control algorithm to produce the rate-based, flow-control data).

Regarding claims 42-44, Lauer discloses an explicit rate and congestion indicator in the form of Resource Management cells feedback to the source; col. 1, lines 50-53. In addition, Lauer teaches that the system comprises the step of comparing and modifying the rate based follow control data in the BRM cell received from the previous node; figs. 7-8; abstract; col. 4, lines 1-16; col. 7, lines 20-32; col. 7, line 61-col. 8, line 13; col. 8, lines 19-55.

Regarding claims 46-47, Lauer discloses that the system comprises microprocessor 80 that stores computer program 82 for computing rate based, follow control, and a buffer 84 that stores resource management data for each virtual channel; fig. 8; col. 8, lines 19-55 (the management event circuitry comprises a processor

connected to a memory, the memory comprising stored instructions to configure the processor to compute and store resource management data; wherein the instructions to configure the processor comprise instructions to associate rate-based, flow-control data with source virtual channels).

Regarding claim 48, Lauer teaches that the microprocessor 80 coupled to buffer 84 controls both buffer 84 and computer program 82 (the management event circuitry and the return cell circuitry comprise a shared processor coupled to memory circuitry).

Regarding claim 49, according to figures 3, 7 and 8, the system disclosed by Lauer shows that the input FRM cell and output BRM cell from/to a source and the output FRM cell and input BRM cell to/from a destination shared transmission circuitry coupled to a physical link (the source port circuitry and the destination port circuitry comprise shared transmission circuitry coupled to a physical link).

Regarding claim 54, Lauer discloses the system comprises a buffer that stores resource management data. Also, the system has a comparator 88 for comparing resource management data in buffer 84 with the resource management data received from BRM cell to determine whether to modify data rate, follow control value in the BRM cell; abstract, col. 4, lines 1-25; col. 7, lines 20-32; col. 7, line 61-col. 8, line 13; col. 8, lines 19-55 (the means for modifying the backward resource management cell comprises: means for storing resource management data prepared using the FRM events; and means for comparing received backward resource management (BRM) cells with the stored resource management data to determine whether to modify the BRM cells before forwarding).

Response to Arguments

Applicant's arguments with respect to claims 37-54 have been considered but are moot in view of the new ground(s) of rejection.

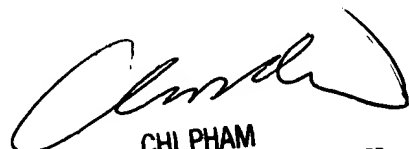
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-18:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang


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SUPERVISORY PATENT EXAMINER
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4/31/05